

tures. In addition, percutaneous pulmonary aspiration with fluoroscopic guidance is a procedure of reasonably high yield when other conventional attempts at establishing the identity of the causative organism, including transtracheal aspiration, are unproductive.

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REFERENCES

- Blank N, Castellino RA, Shah V: Radiographic aspects of pulmonary infection in patients with altered immunity. *Radiol Clin North Am* 10:175-190, Apr 1973
- Bandt PD, Blank N, Castellino RA: Needle diagnosis of pneumonitis. *JAMA* 220:1578-1580, Jun 19, 1972
- Bragg DG, Janis B: The radiographic presentation of pulmonary opportunistic inflammatory disease. *Radiol Clin North Am* 11:357-369, Aug 1973

Endocrine Tumors Localized by Catheter Venous Sampling

PRIMARY ALDOSTERONISM may be due to an aldosterone-secreting tumor (aldosteronoma) or bilateral adrenal hyperplasia. Selective adrenal venography, although capable of visualizing small aldosteronomas with an accuracy of 70 to 80 percent, is accompanied by the hazard of adrenal hemorrhage. However, determination of aldosterone levels in peripheral and adrenal vein blood (obtained via selective adrenal vein catheterization) provides more accurate information regarding the presence or absence of an aldosteronoma versus bilateral hyperplasia, as well as correct lateralization of an aldosteronoma. Small test injections required to determine accurate catheter placement during venous sampling are fluoroscopically monitored and should eliminate the hazard of adrenal gland damage.

In patients with hyperparathyroidism a similar approach—venous sampling for hormone-level determination—can be utilized for more accurate localization of the abnormal parathyroid tissue. This technique is particularly useful in patients with persistent symptoms who have had previous operation on the neck for hyperparathyroidism. Multiple vein specimens are drawn from jugular, innominate, and as many thyroid veins as possible via a catheter introduced into a femoral vein.

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REFERENCES

- Kahn PC, Kelleher MD, Egdahl RH, et al: Adrenal arteriography and venography in primary aldosteronism. *Radiol* 101:71-78, Oct 1971
- Horton R, Finck E: Diagnosis and localization in primary aldosteronism. *Ann Intern Med* 76:885-890, Jun 1972
- Doppman JL, Wells SA, Shimkin PM, et al: Parathyroid localization by angiographic techniques in patients with previous neck surgery. *Br J Radiol* 46:403-418, Jun 1973

Detection of Relapse of Hodgkin's Disease by Routine Radiographs

THE routine UTILIZATION of chest and abdominal radiographs for detection of relapse in patients with Hodgkin's disease was recently assessed. Of 442 patients treated for cure between 1955 and 1970, 130 had relapse. The diagnosis of relapse was initiated by radiographic findings alone in 35 percent of the 130, by simultaneous radiographic and clinical evidence in 30 percent, and by clinical evidence alone in 35 percent. The surveillance radiographs (the abdominal film primarily used to detect changes in retroperitoneal lymph nodes previously opacified by lymphography) yielded positive findings equally between abnormalities of mediastinum-lung and retroperitoneal lymph nodes. Careful comparison of current radiographs with multiple previous studies is essential for detection of the nuances of change indicative of relapse. Periodic surveillance radiographs are essential in the post-therapy evaluation of patients with Hodgkin's disease.

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REFERENCE

- Castellino RA, Blank N, Cassady JR, et al: Roentgenologic aspects of Hodgkin's disease—II. Role of routine radiographs in detecting initial relapse. *Cancer* 31:316-323, Feb 1973

Intracranial Aneurysms in Children

IT IS BECOMING APPARENT that cerebral aneurysms occur more commonly in children than was previously believed. These aneurysms are usually large—a surprising finding in light of the pathogenic theory that the weakened bifurcation point gradually balloons. Unexpectedly, they occur most commonly at the internal carotid bifurcation.

Pediatricians and neurologists have traditionally treated children with subarachnoid hemorrhage conservatively. Cerebral angiography has been sidestepped or needlessly postponed because the procedure was feared unsafe. However, experience with selective percutaneous femorocerebral catheter angiography using appropriately-sized catheter materials has shown the method to be perfectly safe, even for neonates. Its facility provides complete visualization of the cerebral circulation, an absolute necessity in the demonstration of aneurysms.

In a pediatric hospital of constant size, only 11 childhood aneurysms were diagnosed in 20 years